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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,040	12/02/2003	Glenn Butler	LS-004	2671

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EXAMINER
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JOHNSON III, HENRY M

ART UNIT	PAPER NUMBER
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3739

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/726,040	<b>Applicant(s)</b> BUTLER, GLENN <span style="float: right;">C</span>	
	<b>Examiner</b> Henry M. Johnson, III	<b>Art Unit</b> 3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2004.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11, 12, 14, 15 and 18-20 is/are rejected.
- 7) ☒ Claim(s) 10, 13, 16 and 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152).            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

Claims 4 and 5 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The claims relate to intended use, not structure.

Claim 6 is objected to because of the following informalities: the last paragraph is unclear as written. Appropriate correction is required.

Claim 8 is objected to because of the following informalities: the elements are indicated in the independent claim as "at least one of" making it questionable as to whether the elements are positively cited. Appropriate correction is required.

Claim 10 is objected to because of the following informalities: the disclosure does not indicate supply gas to an array, only to the light housing. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 18-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18 recites the limitation "the hyperbaric chamber" in lines 6-7. There is insufficient antecedent basis for this limitation in the claim.

Claim 18 recites the limitation "the target area" in lines 9-10. There is insufficient antecedent basis for this limitation in the claim.

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The term "at least" in lines 6 and 9 cloud the issue of what exactly is being claimed making the claim indefinite.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Application Publication US 2002/0173833 to Korman et al. Korman et al. teaches the use of photodynamic therapy in conjunction with hyperbaric oxygen therapy (paragraph 0063), thus making a hyperbaric chamber implicit. The photodynamic therapy unit may include an array of LEDs (Fig. 4) disclosed as operating in the violet/blue range (400-495 nanometers) and may include a focusing lens (Fig. 2a, # 122).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9, 11-12 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication US 2002/0173833 to Korman et al. in view of U.S. Patent Application Publication US 2004/0068305 to Bansal et al. and further in view of U.S. Patent 5,582,574 to Cramer. Korman et al. are discussed above. Bansal et al. disclose a photodynamic therapy device using LEDs (paragraph 0027) that include patterns of light for providing a targeting mechanism (paragraph 0030) for positioning the light on a target area. The LED's operate at a wavelength of 420 to 500 nanometers (paragraph 0027). This wavelength is disclosed as appropriate for treatment of hyperbilirubinemia (paragraph 0007). A switch is provided that turns the lights on and off and also provides a high and low intensity (paragraph 0026) capability that is interpreted as control and input means (user device). Cramer teaches a hyperbaric incubation chamber with a transparent (Col. 5, line 55) enclosure and a control panel to control the gas pressure and other environmental factors (Col. 7, lines 37-39). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the light as taught by Bansal et al. with the hyperbaric chamber of Cramer using the teaching of Korman et al. as Bansal et al. suggests using the light for treatment of hyperbilirubinemia and new born babies are frequently afflicted with this condition motivating one to use the light with an infant in an incubator.

Regarding claim 7, the switch of the light controls the amplitude and duration.

Regarding claim 8, manual movement of the light of Bansal et al. is interpreted as a position adjustment mechanism.

Regarding claim 12, the method of use is inherent with both devices. The light, to perform photodynamic therapy must be positioned and turned on. Turning on the light inherently selects a wavelength. A hyperbaric chamber by definition must be filled with pressurized gas.

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Regarding claim 15, Cramer discloses a pressure substantially above one atmosphere absolute (ATA), preferably at least two ATA, is maintained in the container (abstract).

### ***Allowable Subject Matter***

Claims 13, 16 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

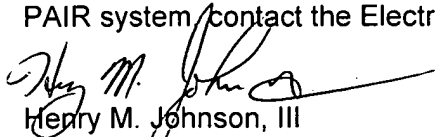
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 6,402,681 to McDonough et al. teaches the use of photodynamic therapy in conjunction with an enclosed incubator. U.S. Patent 5,060,644 to Looi discloses a hyperbaric chamber with a transparent enclosure and controls. U.S. Patent 3,705,576 to Roth teaches an incubator with internal light for treating bilirubin. Numerous other light treatment devices are known that could easily be placed within a closed chamber. U.S. Patent 6,443,978 to Zharov is but one example.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry M. Johnson, III whose telephone number is (571) 272-4768. The examiner can normally be reached on Monday through Friday from 6:00 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Henry M. Johnson, III  
Primary Examiner  
Art Unit 3739